

REMARKS

Claims 1 and 10 are amended in order to more particularly point out, and distinctly claim the subject matter which the Applicants regard as their invention. The Applicants respectfully submit that no new matter has been added. It is believed that this Amendment is fully responsive to the Office Action dated July 16, 2010.

Independent Claim 1, as amended, is to a nozzle for coloring an electric wire, which spouts a liquid coloring agent with a specific amount thereof per spouting toward an outer surface of the electric wire so that a liquid drop of the coloring agent adheres to the outer surface of the electric wire. The nozzle includes a receiver for receiving the coloring agent therein, a first nozzle part formed in a cylindrical shape for allowing the coloring agent to pass therethrough, the first nozzle part communicating with the receiver, the first nozzle part being coaxial with and separate from the receiver, and a second nozzle part formed in a cylindrical shape having an inner diameter smaller than that of the first nozzle part for allowing the coloring agent to pass therethrough, and an outer diameter equal to that of the first nozzle part, the second nozzle part being connected to the first nozzle part, where the second nozzle part is disposed nearer to the electric wire than the first nozzle part is disposed, and where between the first and second nozzle parts there is formed a step protruding inwardly between the first nozzle part and the second nozzle part, and the first and second nozzle parts are always in open communication with each other for spouting of liquid coloring agent there-through from the receiver. The nozzle satisfies a condition of $8 \leq L/l \leq 10$, wherein L is the sum of a length of the first nozzle part and a length of the second nozzle part in a direction in which the coloring agent flows, and l is the length of the second nozzle part in the direction in which the

coloring agent flows, and satisfying a condition of $4 \leq D/d \leq 6$, wherein D is an inner diameter of the first nozzle part, and d is an inner diameter of the second nozzle part. Independent Claim 10, as amended, is to a nozzle for coloring an electric wire, which spouts a liquid coloring agent with a specific amount thereof per spouting toward an outer surface of the electric wire so that a liquid drop of the coloring agent adheres to the outer surface of the electric wire. The nozzle includes a receiver for receiving the coloring agent therein, a first nozzle part formed in a cylindrical shape for allowing the coloring agent to pass therethrough, the first nozzle part communicating with the receiver, the first nozzle part being coaxial with and separate from the receiver, and a second nozzle part formed in a cylindrical shape for allowing the coloring agent to pass therethrough, the second nozzle part having an outer diameter equal to that of the first nozzle part and being connected to the first nozzle part, where the second nozzle part is disposed nearer to the electric wire than the first nozzle part is disposed, and the first and second nozzle parts are always in open communication with each other for spouting of liquid coloring agent there-through from the receiver. The second nozzle part is made of polyetheretherketone, and satisfies a condition of $8 \leq L/l \leq 10$, wherein L is the sum of a length of the first nozzle part and a length of the second nozzle part in a direction in which the coloring agent flows, and l is the length of the second nozzle part in the direction in which the coloring agent flows, and satisfying a condition of $4 \leq D/d \leq 6$, wherein D is an inner diameter of the first nozzle part, and d is an inner diameter of the second nozzle part.

In the Office Action. Claims 1-8 were rejected as anticipated under 35 U.S.C. 102(b) in view of Moen (U.S. 3,273,757); and Claims 9 and 10 were rejected as obvious in view of a combination of Moen and Rau (U.S. 4,897,439). Reconsideration and removal of these rejections are respectfully

requested in view of the present claim amendments and the following remarks.

In response to the previous amendments to the claims and the arguments made, the Office Action states that, while in Moen the first (22) and second (32) nozzle parts are not always in open communication with each other, as the connection between the two is sometime blocked by a conical valve obturator (74), when the valve is in an opened position (Moen: column 5, lines 4-24 and FIGS. 6 and 10), Moen teaches that such a valve system functions to interrupt the flow of material and to prevent adhesive material dispensed from the nozzle from setting inside the nozzle.

It is then asserted that the elimination of an element and its function does not distinguish a claimed invention from the prior art where said function is not desired, and that one of ordinary skill in the art at the time of the invention, desiring to use the nozzle of Moen to dispense a continuous flow of material, would therefore have found it obvious to remove the obturator (74), with the ordinary and expected result that such a modification would allow for an uninterrupted flow of material.

The additional detailed dimensional feature of Claim 8 has been added to Claims 1 and 10, with Claims 6 and 7 canceled.

These dimensional limitations provide unexpected benefits, as described on pages 31 and 38-46 of the present specification.

The particular claimed relative dimensions provide that the coloring agent is spouted from the second nozzle member with sufficient force such that the coloring agent is not adhered to the second nozzle member and such that uniform spouting from the second nozzle is achieved and scattering of the spouted coloring agent does not occur. In addition, the coloring agent material from

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the first nozzle into the second nozzle is pressurized to maintain a liquid drop form and is spouted in a desired direction, and the spot formed on the wire can be of a desired size. Such unobvious advantages are described in the present specification.

The Rau reference does not cure the defects of Moen.

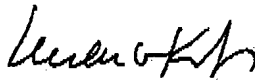
In view of the aforementioned amendments and accompanying remarks, Claims 1-5, 9 and 10, as amended, are believed to be patentable and in condition for allowance, which action, at an early date, is requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the Applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 1-2340.

Respectfully submitted,

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